Integrated Air and Missile Defense (IAMD) Roadmap

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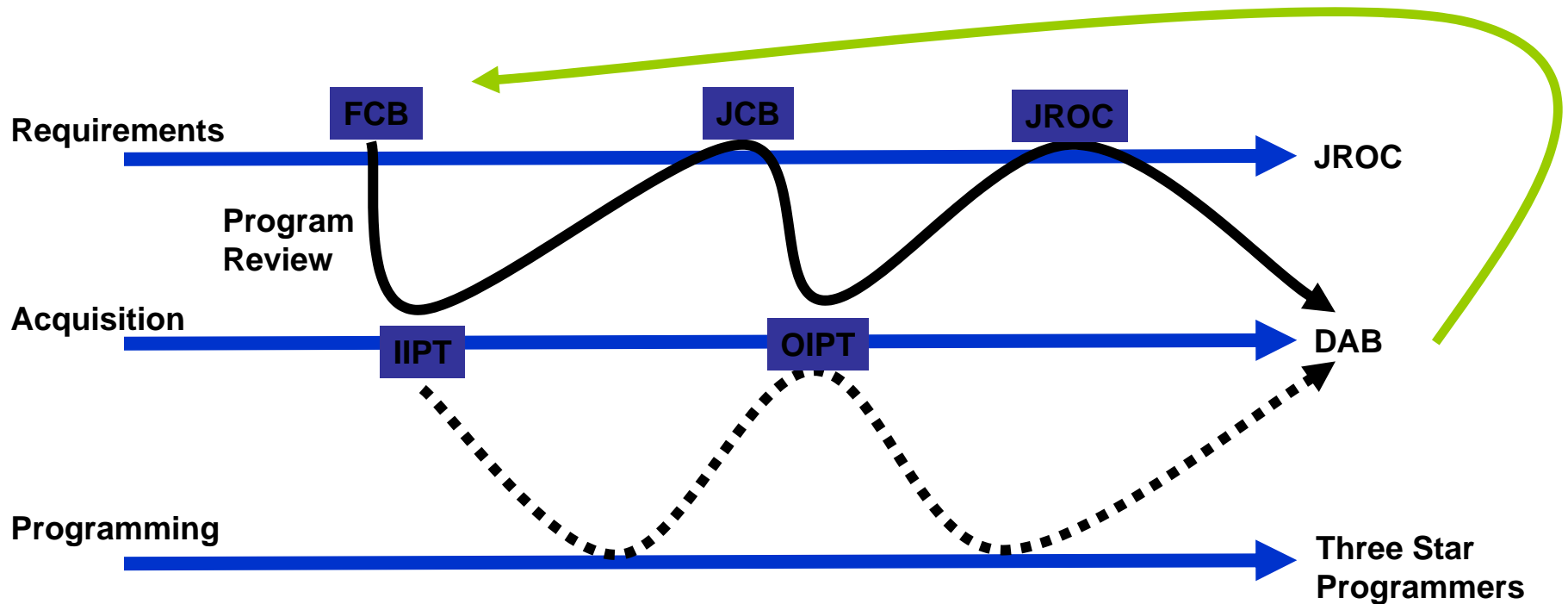
OUSD(AT&L)

Director, Joint Advanced Concepts

Background

- "Roadmapping" began in March 2003 with first version of the UAV roadmap followed by
  - JBMC2 Roadmap (Nov 2004)
  - IAMD, V0 (May 2004)
  - IAMD, V1 (May 2005)
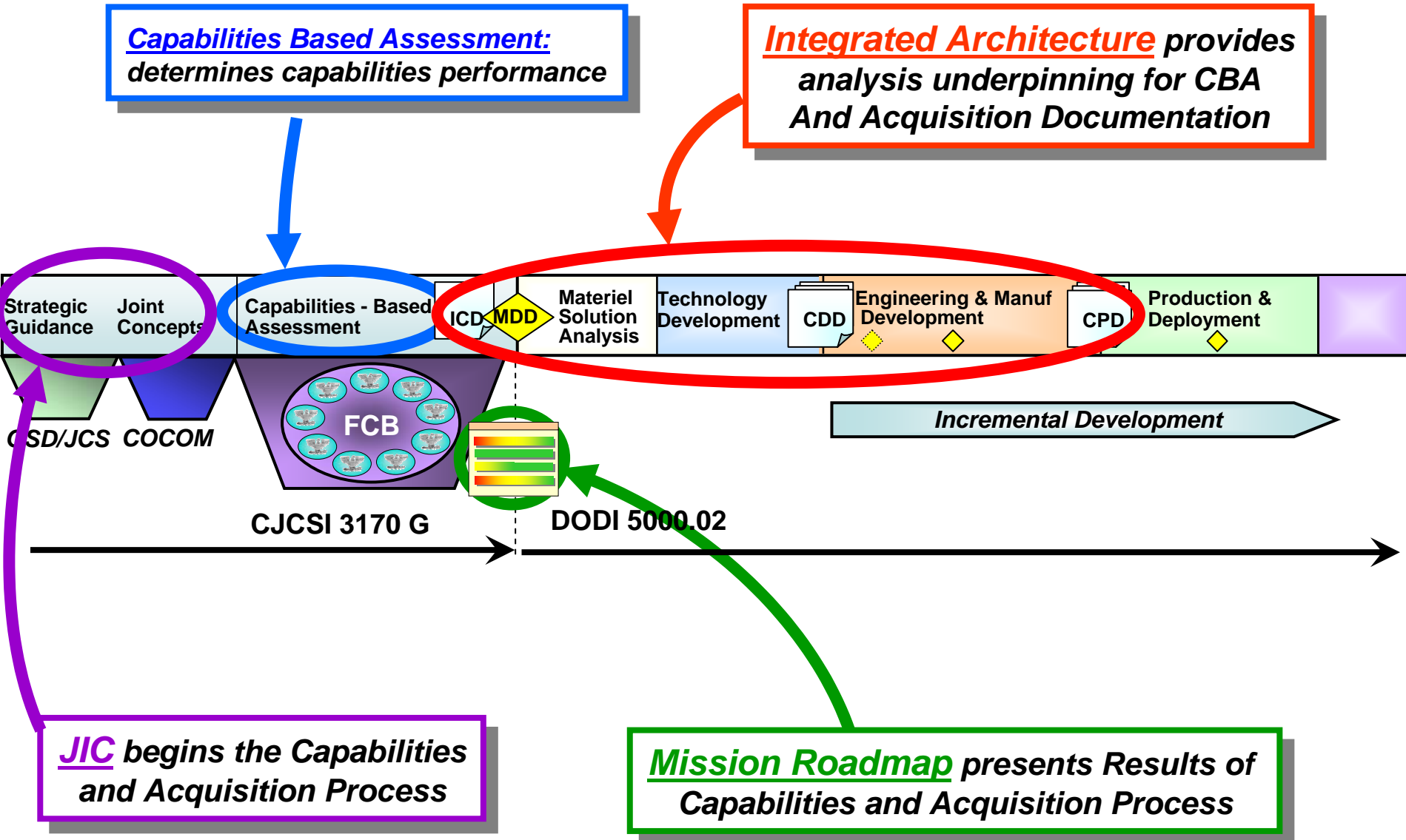 - UAV, V2 (August 2005)
  - IAMD, V2 (February 2007)

Capabilities Based Roadmap Flow

Requirements

FCB

JCB

JROC

JROC

Program Review

Acquisition

IIPT

OIPT

DAB

Programming

Three Star Programmers

Requirements Process

········▶ Acquisition Process

DOD End-to-End
Capabilities and Acquisition Process

Capabilities Based Assessment: determines capabilities performance

Integrated Architecture provides analysis underpinning for CBA And Acquisition Documentation

Strategic Guidance | Joint Concepts

Capabilities - Based Assessment

ICD | MDD | Materiel Solution Analysis | Technology Development | CDD | Engineering & Manuf Development | CPD | Production & Deployment

OSD/JCS | COCOM

FCB

CJCSI 3170 G

DODI 5000.02

Incremental Development

JIC begins the Capabilities and Acquisition Process

Mission Roadmap presents Results of Capabilities and Acquisition Process

Roadmapping

- **Nature of Roadmap will vary by topic**
- **Must start with view of where we want to go**
- **Include assessment of where we are**
- **Lay out Department's strategic plan considering:**
  - **Material and non-material solutions**
  - **Capability that only exists at Family-of-Systems/System-of-Systems level**
  - **What to expect from each system**
  - **Network enablers**
  - **Management, engineering, and testing activities that cut across a capability area**
  - **Affordability**
  - **Other considerations**

IAMD Roadmap Supported DAB-Level Mission Capability Area Review

Objective: Relate acquisition, capability and programming processes to provide senior leaders an overall context and understanding of mission area

Scope:

- **Supports mission-level Capability Area Reviews**
  - **Provides links across policy, capability generation, acquisition, and budgeting processes**
  - **Provides basis to set metrics and gauge progress in developing capability over time**
- **Evolutionary Roadmap process provides increasingly broad range of systems / initiatives**
  - **"Version 0" addressed TAMD missions and supporting systems**
  - **"Version 1" including GBMD missions and expanded set of supporting systems**
  - **Later versions to implement CBA results**

Approach:

- **To contribute to the development of an approach that supports both the "joint capabilities" and "acquisition" oversight, review, and coordination / synchronization processes**
  - **Describe AMD systems and incremental attainment of AMD mission capabilities**
- **Collaborative AT&L / FP FCB process**
  - **Formal staffing and review by Warfighter (Services, COCOMs, Joint Staff, Agencies) and Acquisition communities**
- **Implement ADM guidance**
  - **System Engineering across AMD FoS**
  - **Identify program synchronization options**
  - **Address AMD FoS testing issues**
  - **DAB-level AMD CAR scheduled Jan 05**

IAMD Roadmap Evolution

V1 – Jan 05
- TAMD (JTAMDO / JSSEO)
- BMD) (MDA)
- FoS Testing (DOT&E/DT&E)
- SIAP BLK 0/1 Imp (JSSEO)
- Mode 5 IFF Imp (DASN C4I/IWS)
- BMC2 Integration (?)
- JBMC2 IAMD JMT (JFCOM)

- **Capabilities Assessment Methodology**
  - TAMD CRD – Concept
  - Analysis Plan (IDA)
  - MOEs/MOPs

- **General Improvements**
  - DOTMLPF (JFCOM)
  - Emerging Technologies (MDA/DDR&E)
  - Net-Centric (J6/ASD NII)

V2 – Dec 05
- Begin to show **architecture analysis** results
  - System performance parameters
  - System to System interoperability
  - System contributions to AMD FoS
  - Mission performance

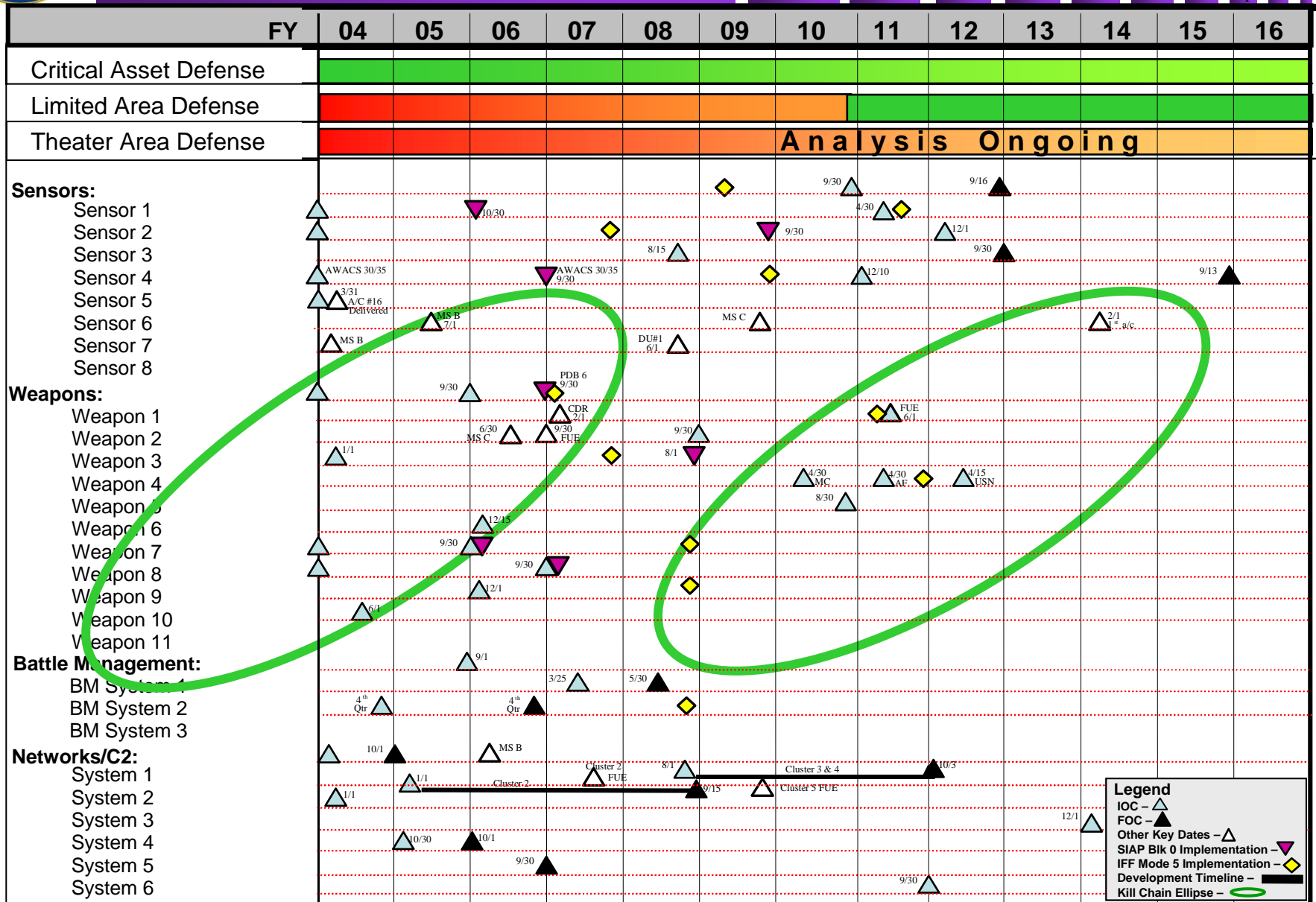- Propose **methodology for FoS Assessment**
  - Trade studies (Gaps / Overlaps)

- Provide overarching **IAMD Ops Concept**

V3 – Sept 09
- Rework of ACMD, V2
- Refinement of Capability Area Assessment Methodology (CAAM)
- Inclusion of components for Homeland Defense and BMD

IAMD Roadmap: Capability Description

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